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Supporting Open Access Processes Through Library Collaboration

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Abstract

The HHuLOA project is a two-year collaborative project run by the Universities of Hull, Huddersfield, and Lincoln in the United Kingdom. The project is funded under the Jisc Open Access Good Practice Pathfinder Projects and seeks to identify how open access support mechanisms can be used to assist with the development of research. By working together, the institutions hope to achieve more than the sum of our individual developments. This paper outlines a number of work packages that the project has completed. These work packages have all involved crowdsourcing with other United Kingdom universities in order to sense check the outputs. A key part of the project was to disclose findings, in order to spread experience and good practice identified to the rest of the academic library community. This paper shows how some of the outputs can be used and suggests further development within the community. Finally, the project welcomes further feedback and examples of open access good practice that can be shared.

Introduction

The Universities of Hull, Huddersfield, and Lincoln are three medium-sized institutions in the north of England. Each university has a growing research portfolio and, like other universities, each has been active in supporting open access (OA) for many years. All are institutions seeking to develop their research capability and reputation further. Recognising this commonality between the three universities, a successful joint bid was made to the Jisc Open Access Good Practice Pathfinder programme¹ as the HHuLOA (Hull, Huddersfield, Lincoln Open Access) project.² The project's aim was to work collaboratively to identify how OA support mechanisms can be used to assist with the development of research; we all also wished to develop our open access processes, comply with external policy drivers, and help to communicate and embed open access locally. Recognising the desire not to duplicate activity and also benefit

from each other's input, we sought to work together to achieve more than the sum of the institutions' individual developments. The three institutions have been able to bring a wealth of complementary experience and innovative thinking to capturing existing and novel good practice, and combining this for greater effect.

The HHuLOA project addressed a number of themes, each a component of the broader aim:

- Establishing a baseline of what institutions are doing to support open access, capturing information from a group of institutions and sharing this openly
- Investigating a means of facilitating better navigation of funder open access policies so their terms can be met
- Developing open access lifecycles from different stakeholder perspectives

- Exploring how open access can be managed across institutional stakeholders, including research support offices
- Understanding how open access might be embedded within e-resource management processes to aid local streamlining of workflows

To achieve this, the project was broken up into a number of work packages. Each institution took the lead on two to three of these, taking on the bulk of the work but always with the ongoing input and feedback from the partners to cross-check the direction of the work and co-review progress. Skype calls kept us all in regular contact, which were also then supplemented through quarterly face-to-face meetings, where a lot of the joint effort took place. None of the partners would have pursued the individual work packages without help from the others to encourage and support the effort undertaken. Throughout the project, the HHuLOA team also felt that many pairs of eyes were crucial to the project's success. Therefore, many of the work packages were crowdsourced. The team was influenced by other projects^{3,4} and used open access and project listservs, the project blog, a number of conferences and seminars, and two workshops held in June 2015 and May 2016 to harness this collective intelligence.⁵ This paper highlights how the collaboration was essential for the completion of the work across the work packages.

Baseline Case Study of Open Access Activity

In keeping with many of the Jisc Open Access Pathfinder projects, HHuLOA kick-started by capturing baseline information in order to establish a starting point. A list of criteria against which it was felt useful to assess progress was compiled. This list was based on a combination of known current open access activities with areas highlighted in the UK's HEFCE REF (Higher

Education Funding Council for England Research Excellence Framework) Open Access Policy,⁶ which we knew we would all be working towards compliance. In September 2014 the three partner institutions completed this to provide the project with a clear picture of current open access activity at each site.⁷ This information was then to be updated at six-monthly intervals to assess how the partners were progressing in adoption of open access. This 'being open about how we are being open' approach was a very positive way to start the project, and helped us mutually focus our minds on what we actually were doing locally and what we hoped to do going forward. It also gave us the confidence to be honest with each other about what was working and what was not!

It was soon realised that if other institutions also made use of the same list of criteria useful information about trends across the United Kingdom academic sector on OA developments could be captured. The baseline spreadsheet was subsequently made openly available. Nine institutions have taken up this challenge and have reflected some of their own experiences in establishing open access within their institutions. The compilation of data has enabled an initial analysis of some of the trends across institutions that are being faced when implementing open access. In no particular order, these are:

1. Quality assurance of research output records sits with the Library, irrespective of how deposit is carried out. Quality assurance seems to be a role that libraries are being recognised for as part of the open access process
2. Text-mining is a largely unexplored area, with a major sticking point being the default use of PDF as the file type being deposited. Text-mining has not hit the radar yet, or at least not in the institutions providing data

3. The heaviest focus is on green open access, with gold open access as an add-on. Pragmatism is seemingly winning out over policy preference (by the United Kingdom government)
4. Reporting is an underdeveloped area. Internal reporting will help raise the profile of what open access through the repository can enable
5. Metadata entry does use automated tools (e.g., CrossRef if supplying a DOI), but much effort is still manual. This is an area of development within Jisc to support United Kingdom policy compliance. It is seen as a key area to assist with ensuring repository records are managed in a timely fashion
6. There is widespread availability of policies for OA, informed by an institutional body. It was good to see that almost all those providing information have a local open access policy to inform their local practice
7. Creative Commons licences are used widely, but only when required. Responses suggested that United Kingdom funder policies are influencing use of CC licences. However, the responses also suggest that institutions are not promoting their own view of such licences, or looking to make use of them more generally
8. Most sites responding seem to have one or more full-time equivalent member of staff working on OA. This is not to say the staffing resource is sufficient, but that there is some substance to how institutions are tackling open access that was not present a few years ago
9. A widespread mix of support services within universities are involved in open

access. But it was less positive to note that direct academic involvement was not high

10. The main concerns noted were: resources, time, and the journal acceptance date (which is a condition of United Kingdom funder compliance).

There is no doubt that many of these findings are not new, but it has been very useful to have evidence of them based on the data received. The baseline survey will remain open and those interested in contributing are welcome to submit criteria.

Communicating the Policy Landscape

In the United Kingdom, the funder policy landscape regarding open access has shifted dramatically since 2012. Policies have been created by government bodies, funding agencies of all types, commercial publishers, scholarly societies, and universities. However, there has been no attempt to coordinate policy terminology. This has left many academic staff confused, frustrated, and stressed by new obligations placed upon long-established publishing practices and by the way in which these changes have been communicated. The pace of change has been rapid. However, universities and research communities have been relatively slow in adapting to this change. There is no one single place for researchers to navigate and compare all policies. Neither is there a way to check overlapping policies.

The European Union-funded PASTEUR4OA (Open Access Policy Alignment Strategies for European Union Research) Project⁸ has recognized that many OA policies are inconsistent in their layout and terms and that open access terminology has never been standardized. This has meant that research support staff often have to explain policies to academic colleagues. The lack of joined-up thinking has also meant the policies have been misinterpreted and in some cases misrepresented by pro- and anti-open access

groups. PASTEUR4OA proposed a set of standard fields for structuring policies to ease this issue. The HHuLOA project wanted to find a way to navigate through the various policies, which would then have the potential to interpret multiple policies. For example, the funder, institutional, and journal open access policy.

The project set out to identify as many different European and US funder policies as possible, soliciting suggestions via mailing lists and blogs in addition to mandates and statements from stakeholder organizations. The policies were then analysed in order to extract statements and conditions. These were codified on a spreadsheet; each of the columns on the spreadsheet represents a different policy statement and has a pseudo-variable name as a placeholder. Where possible, the project attempted to give each column a controlled list of options in order to standardize the policies where wording differed. However, it should be noted that this process was subjective. Like other outputs, the spreadsheet was crowdsourced via a Google Drive spreadsheet,⁹ which will remain available after the project concludes. The data is available with a Creative Commons CC0 'no rights reserved' public domain waiver licence and further input is encouraged. The University of Lincoln led this work, and it was validated by the project partners prior to more open sharing. The University is now hoping to use this data in a dashboard as a data source to filter information and guidance based on a researcher's commitments to particular funders. The project is keen to hear of any other potential uses of the data.

Open Access Workflows

One of the project's aims was to look at open access service development. This was done by matching Jisc OA services and current institutional workflows against the six sections of OAWAL (Open Access Workflows for Academic Librarians).^{10,11} OAWAL is a crowdsourced resource developed for librarians

new to open access and was developed around the same time that the Jisc OA Pathfinder projects were initiated. As a starting point, the HHuLOA team decided to develop an open access life cycle based on initial concepts developed by Neil Jacobs at Jisc.¹² (See Figure 1.)

The team collaboratively matched existing Jisc OA services and OA and related standards to institutional workflows and OAWAL. This process assessed the gaps in Jisc services that would need to be filled for institutional workflows to better connect. The resulting blog post was then shared with Jisc and the wider open access community in the United Kingdom for further comment and feedback.¹³

Open Access Life Cycle

Figure 1 was then used as a basis for the next piece of work, the open access life cycle. This brought together Jacobs' seven parts of the research life cycle, OAWAL, Jisc OA/above campus services, publisher services, and the institutional workflow. The first life cycle shows the viewpoint from a librarian/repository manager. The result was the UK open access life cycle.¹⁴ Figure 2 shows the US life cycle, which was adapted from the UK life cycle by Stone and Emery.¹⁵ The centre circle shows the seven stages of the publishing process as described by Jacobs. This is followed by institutional processes, although not all institutions will have all of these processes up and running. For example, not all institutions have a Current Research Information System (CRIS). The next circle illustrates publisher services that directly impact upon the work of the open access team. Above campus services are then mapped to the life cycle. Finally, the six sections of OAWAL are shown. (See Figure 2.)

Once again the project used crowdsourcing to obtain comment and feedback on the life cycles. One suggestion was that there needed to be a se-

ries of life cycles for researchers, research managers, and publishers. These were put together by Huddersfield in the autumn of 2015 in conjunction with the OAWAL project and validated by the project partners through a peer review process. The life cycles were then premiered at the Charleston Conference.¹⁶ Further comments were received from the community in the United States and the United Kingdom and the life cycles have now been further enhanced. The life cycles follow a similar pattern, looking at the OA services that touch on the researcher, research manager, and publisher journey. An important addition to the research manager life cycle is the Sponsored Project Lifecycle created by Portland State University,¹⁷ which replaces the six sections of OAWAL.

These have now been made available as part of the HHuLOA project outputs^{18,19,20} and are all available with a CC BY licence. The project welcomes further comments and adaptations.

Each life cycle centers in on a particular workflow. One particular comment regarding the life cycles was the need to merge them into one workflow in order to understand the constituent parts. In order to do this, the project attempted to create a 'tube map'²¹ in order to connect the various lines. Particular activities become 'stations', with the lines intersecting where two or more of the stakeholders met. Figure 3 shows the final iteration, which was made available in May 2016 after further comment by the community. (See Figure 3.)

The tube map, like the life cycles, is essentially at version 1.0. Further comments are being received and this will inform future versions. OAWAL will attempt to capture these after the HHuLOA project completes.

Understanding the Relationship Between Open Access and Research Development Within the Institution

A key theme of the HHuLOA project has been to understand how OA links to research workflows within an institution. If open access is going to achieve its potential it needs to be seen as a fixture in the options academics consider for their dissemination, going beyond the funder requirements that are making them do so. HHuLOA explored two facets of this relationship to help better understand how they might develop in the future:

- The involvement of institutional stakeholders in managing open access alongside the library;
- The inclusion of open access within institutional strategies. That is, the documents driving the long-term operational activity undertaken.

A survey developed to explore these points was carried out at the end of 2015, led by the University of Hull and reviewed by the project partners. It encouraged librarians and other stakeholders, predominantly those working in research support offices, to participate. Forty-seven responses were received representing a broad range of different institutions, and whilst the majority of respondents were from libraries there was also input from elsewhere.

A major part of the survey asked respondents to consider how OA workflow tasks (which were based on the open access life cycle work) might be undertaken in two years' time compared to now. A general trend emerged that suggested a spreading of responsibilities for OA, with the library taking the lead role but involving other institutional stakeholders alongside. For example, at the start of the life cycle, open access advocacy was regarded as a task that others could just as well engage with, whilst at the end of the life cycle, OA statistics and impact monitoring

are seen as tasks that research support and faculties should be looking to get involved with themselves more directly.

Similar trends were seen for almost all OA tasks, with two exceptions. In the areas of deposit, metadata management, and embargo management, the library was still very much regarded as the primary service provider. This mirrors known library skills so is perhaps not so surprising. Although associated comments received suggested it would be good if deposit could be more direct, whether from academics or through automated means. The second exception related to the technologies that are used to manage research. In particular, the survey suggested that libraries would be more engaged in managing or working with the local research information system. This engagement in the research process may well be related to managing publications within this system, but highlighted that libraries see their role as being part of the overall system process.

The second half of the survey explored how OA was being included within institutional strategies. Just over half the respondents did have a strategy including open access, and 30% referenced it in more than one strategy. Predominant were library strategies, not surprisingly, but there was also widespread mention in research strategies and a few university strategies as well (although not faculty/departmental strategies). This inclusion has led to higher visibility and buy-in on open access, as hoped for, and often came about because of interaction with other institutional stakeholders. The dissemination benefits of OA were advocated strongly, but also the community benefits and the reputational benefit to the institution from being seen to be open within the wider academic community. It is too early to be able to assess the full impact of having open access within institutional strategies, but there appear to be early seeds of the benefits it can bring.

Library Processes and Open Access

The project also investigated the link between existing library processes and OA. Libraries already have well established processes in place to manage the e-resource life cycle. However, OA workflows are often seen as a separate set of add-on processes. At one face-to-face project meeting the team investigated how OA workflows could be embedded into e-resource management. This was achieved by sharing understanding of how e-resource workflows operated at the three partner institutions and how OA might link into these, specifically using Techniques in E-Resource Management (TERMS)^{22,23} as an established resource and starting point. The version of TERMS used by HHuLOA was a nuanced version, which identified an area that TERMS had not originally covered: preservation.²⁴ Therefore, the six revised elements that the HHuLOA team looked at were:

1. Investigating new content for purchase or addition
2. Acquiring new content
3. Implementation
4. Ongoing evaluation and access, and annual review
5. Cancellation and replacement review
6. Preservation.

The team held a collaborative exercise to map areas of the open access life cycle to TERMS, the results of which are available as part of a project blog post.²⁵ Where possible open access was divided into hybrid OA where subscription articles include some OA content and full open access in order to reflect unique themes. However, some of the points under open access could also apply to hybrid open access.

The collaborative process allowed the three institutions to exchange their in-house practices

and concerns. The exercise proved valuable in bringing OA and subscription experiences together, for example around the area of hybrid journals, total cost of ownership, and offsetting. Offset agreements are intrinsically linked to journal/big deal subscriptions, therefore if gold OA via hybrid journals is to be used, these journals must be considered as part of the wider costs – the total cost of ownership. A further area of agreement was around the selection of fully open access journals and the need for ‘kitemarks’ or marks of quality in this area. A third example that came out of the discussion were issues around discovery for both hybrid and fully OA journals.

A poster was produced for the Northern Collaboration Learning Exchange on OA5 and this resulted in further discussion with the participants. One area that was highlighted was when a hybrid title moves publisher. In some cases delegates found that gold OA articles did not remain available under the same terms that had been agreed with the previous publisher. It was felt that this should be added to the ‘ongoing evaluation and access, and annual review’ section.

It is hoped that after the completion of the HHuLOA project these points will be taken on by TERMS as part of a planned revision due to start in summer 2016. In keeping with the origins of TERMS, it is proposed that this revision will be crowdsourced to develop and mature it for future use.

Reporting and Reflecting the Work to the Community

A requirement of all Pathfinder projects was to disclose findings as the work packages were carried out in order to spread experience and good practice identified to the rest of the academic library community. To that end, every project has

a blog through which work has been disseminated, including reports of the many events that have been organised up and down the country.

The HHuLOA project has followed suit with this approach and operated its own blog through which the different work packages within this article have been disseminated. However, key to the project has been to engage the community in the different areas of activity to validate the findings and ensure that they had relevance to others as well as the three project partners.

Activity around the baseline spreadsheet has relied on input from other institutions alongside the project partners to validate its evidence. The link has been widely disseminated through email and at various events to encourage participation, with some useful success.

The team have held two project events, one at the end of each year of the project. The first event, in June 2015, focused on initial work at that point, covering the baseline spreadsheet, the OA policy navigation and the OA life cycles, and also explored initially the link between research offices and libraries in managing open access. The second event, in May 2016, placed the project’s work alongside related work from other projects in the North of England, to foster understanding of how the different project outputs might be used together to support OA development elsewhere. The project has also contributed towards end of programme events for the academic community, covering all substantive areas of the project’s work.

A number of presentations have been given at regional (Northern Collaboration), national (Research Libraries UK) and international (Charleston) conferences focused on library services, plus a publisher-oriented conference (Researcher to Reader) to encourage engagement by this sector and find common ground we can

work with to establish a new pattern of publishing activity. Of particular interest has been the OA life cycles, which have been adopted by Jisc and others to help place OA service components in context with each other. These have been disseminated through programme and other Jisc events.

The project has covered a lot of ground within its two-year lifespan. Looking back, the project partners have sometimes reflected that we may have bitten off more than we needed to or should have, given the limited time we were able to dedicate to the project alongside day-to-day activity (no more than 0.1 FTE). However, by mutually recognising our common aims (use open access to develop research, develop our open access processes, comply with external policy drivers, help to communicate and embed open access) we were able to get a clearer focus on what we wanted to achieve and know that we could call on colleagues to validate, test, feedback, and discuss the issues being addressed.

Further Work and Conclusion

The HHuLOA project has generated some useful questions as well as developing an understanding of how open access can work. These will remain of interest for the project partners, but are also reflected here for wider potential take-up:

- Is capturing the baseline information and progress in open access development useful? The team are currently exploring ways to extend the spreadsheet beyond the project's lifetime to maintain an ongoing community awareness of institutional open access development. Hence, input from other institutions remains valid
- The OA policy navigation work suggests that there is the stub of a tool to foster better navigation in the making. The project

is interested in picking this up with others who have a similar interest

- The OA life cycles will, no doubt, need updating as services evolve, and that will be a measure of their success in supporting such developments. Other stakeholder perspectives may also be useful, and others are encouraged to generate their own versions of these and the tube map and share these to add to the set of diagrams
- The role of stakeholders across the university in properly embedding this service will continue to evolve and generate different solutions in different institutions. The inclusion of open access within institutional strategy will also develop, although for this to be effective it will require further consideration of what institutions actually want to achieve through open access other than compliance.
- The links between open access and e-resource management have been highlighted through the project's work. There is a challenge to see how the questions raised can be answered through practice. The response to this connection has been very positive, and such embedding will surely only increase to better streamline open access workflows.

The HHuLOA blog and the relevant Google documents will remain open after the project closes. The project team welcome any further feedback on the work package. Examples of good practice from the community are also welcome.

Acknowledgements

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Figure 1. Open Access Life Cycle, Neil Jacobs. Used under a Creative Commons Attribution 4.0 International licence: <https://creativecommons.org/licenses/by/4.0/>

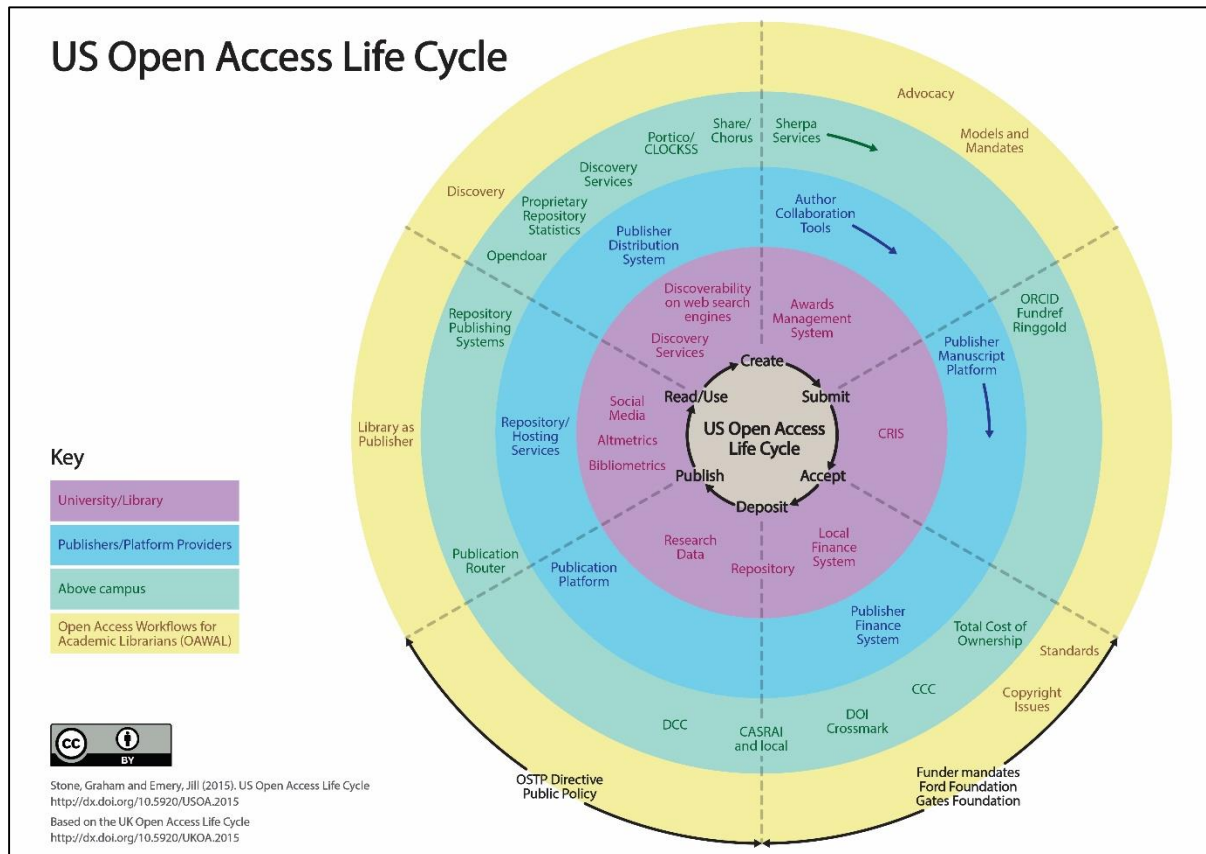


Figure 2. The US Open Access Life Cycle. Used under a Creative Commons Attribution 4.0 International licence: <https://creativecommons.org/licenses/by/4.0/>

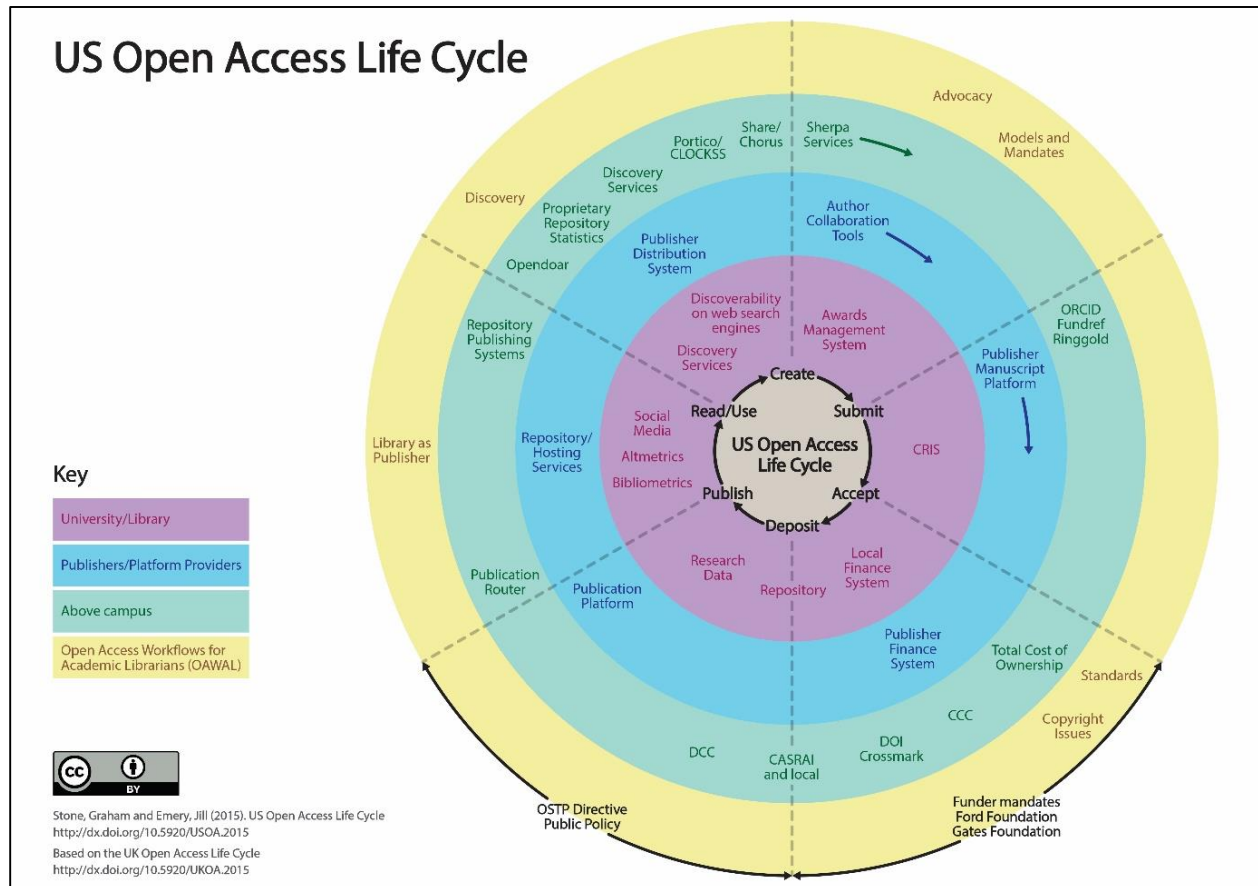
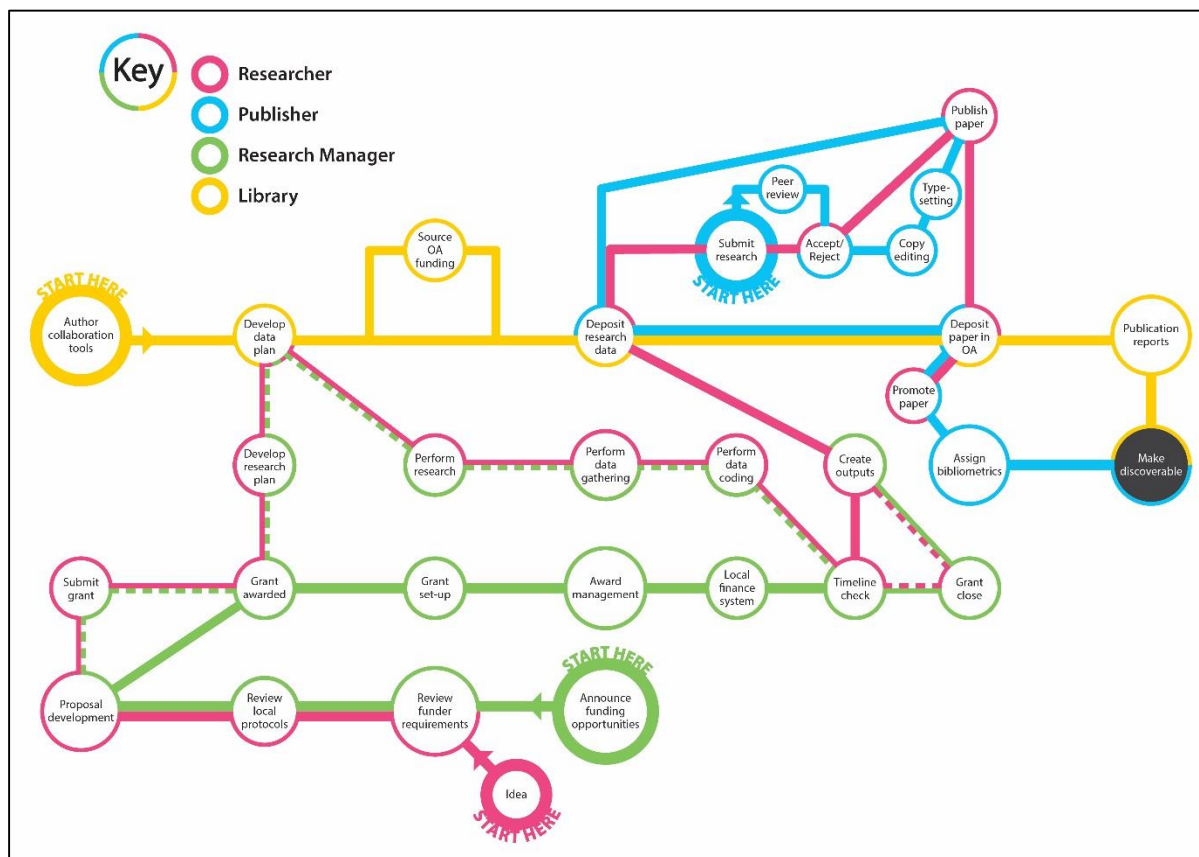


Figure 3. OA Tube Map. Used under a Creative Commons Attribution 4.0 International licence:

<https://creativecommons.org/licenses/by/4.0/>²⁶



Endnotes

¹ Jisc, "Jisc Open Access Good Practice Pathfinder Projects," <https://openaccess.jiscinvolve.org/wp/pathfinder-projects/>

² HHuLOA, "HHuLOA project blog," <https://library3.hud.ac.uk/blogs/hhuola/>

³ Jill Emery and Graham Stone, "The Sound of the Crowd: Using Social Media to Develop Best Practices for Open Access Workflows for Academic Librarians (OAWAL)," *Collaborative Librarianship* 6, no.3 (2014): 104-111, <http://collaborativelibrarianship.org/index.php/jocl/article/view/331>

⁴ Jill Emery and Graham Stone, "TERMS: Techniques for Electronic Resources Management."

Library Technology Reports 49, no.2 (2013): 5-43, <http://dx.doi.org/10.5860/ltr.49n2>

⁵ Chris Awre et al., "Northern Collaboration Learning Exchange on Embedding Open Access" (papers presented at the Northern Collaboration Learning Exchange on Embedding Open Access, York, UK, May 12, 2016). <http://eprints.hud.ac.uk/28362/>

⁶ HEFCE, "REF Open Access Policy," <http://www.hefce.ac.uk/rsrch/oa/>

⁷ HHuLOA Project, "Open access baseline and development," https://docs.google.com/spreadsheets/d/1MN7Qw_wIU2LMGn-lcmjzgufjZuhzL6F_ay4lhcQEGKv8/edit#gid=0

⁸ PASTEUR4OA, "Welcome", <http://www.pasteur4oa.eu/>

⁹ HHuLOA Project, "WP2 communicating the policy landscape: data", <https://docs.google.com/spreadsheets/d/1as-bBZWbWPBs8p4tvOyO62acz1i3sjnZ09rbYY1Yk2Sc/pub>

¹⁰ Jill Emery and Graham Stone, "Introduction to OAWAL: Open Access workflows for Academic Librarians." *Serials Review* 40, no.2 (2014): 83-87, <http://dx.doi.org/10.1080/00987913.2014.924307>

¹¹ Jill Emery and Graham Stone, "OAWAL," <https://library3.hud.ac.uk/blogs/oawal/>

¹² Neil Jacobs, "Open Access: recalibrating the relationships" (paper presented at DARTS 4, Totnes, UK, June 5-6, 2014). <http://www.slideshare.net/ARLGSW/darts-nj-june-2014>

¹³ Graham Stone, "Mapping open access requirements to Jisc services and OAWAL," <https://library3.hud.ac.uk/blogs/hhu-loa/2015/03/27/mapping-open-access-requirements-to-jisc-services-and-oawal-1/>

¹⁴ Graham Stone, Chris Awre, and Paul Stainthorpe, "UK open access life cycle," (2015) <http://dx.doi.org/10.5920/UKOA.2015>

¹⁵ Graham Stone and Jill Emery, "US open access life cycle," (2015) <http://dx.doi.org/10.5920/USOA.2015>

¹⁶ Jill Emery and Graham Stone, "What goes around, comes around: calibrating the academic research life cycle to the open access life cycle" (paper presented at the 35th Annual Charleston Conference: Issues in Book and Serial Acquisition, Charleston, South Carolina, November 4-7, 2015). <http://eprints.hud.ac.uk/25644/>

¹⁷ Portland State University, "Sponsored Projects Lifecycle," <https://sites.google.com/a/pdx.edu/research/lifecycle>

¹⁸ Graham Stone, Chris Awre, Paul Stainthorpe, and Jill Emery, "UK open access life cycle: for publishers," <http://dx.doi.org/10.5920/UKOAPUB.2016>

¹⁹ Graham Stone, Chris Awre, Paul Stainthorpe, and Jill Emery, "UK open access life cycle: for research managers," <http://dx.doi.org/10.5920/UKOARES.2016>

²⁰ Graham Stone, Chris Awre, Paul Stainthorpe, and Jill Emery, "UK open access life cycle: for researchers," <http://dx.doi.org/10.5920/UKOARES.2016>

²¹ Wikipedia, "Tube map," https://en.wikipedia.org/wiki/Tube_map

²² Emery & Graham Stone, "TERMS: Techniques for Electronic Resources Management."

²³ Jill Emery and Graham Stone, "TERMS blog," <https://library3.hud.ac.uk/blogs/terms/>

²⁴ Jill Emery and Graham Stone, "Techniques for Electronic Resource Management (TERMS): from coping to best practices," (paper presented at the 2014 AALL Annual Meeting and Conference, San Antonio, TX, July, 12-15, 2014), <http://eprints.hud.ac.uk/19420/>

²⁵ Graham Stone, "Mapping open access to e-resources workflows," <https://library3.hud.ac.uk/blogs/hhu-loa/2016/05/11/mapping-open-access-to-e-resources-workflows/>

²⁶ Graham Stone, Chris Awre and Paul Stainthorpe, "The open access tube map," <http://dx.doi.org/10.5920/oatubemap.2016>